

*Technology and the West*. Edited by Terry S. Reynolds and Stephen H. Cutcliffe. University of Chicago Press, Chicago, IL. (1997). 461 pages. \$37.95 (hardback); \$18.95 (paperback).

Contents:

Introduction (Terry S. Reynolds and Stephen H. Cutcliffe). Overview: Technology and history: "Kranzberg's Laws" (Melvin Kranzberg). Technology and the West through Britain's Industrial Revolution (to ca. 1850): Technology in the preindustrial West (Terry S. Reynolds and Stephen H. Cutcliffe). The first technological revolution and its lessons (Peter F. Drucker). Greek catapults and catapult technology: Science, technology, and war in the Ancient World (Barton C. Hacker). The technical act: The act of invention: Causes, contexts, continuities and consequences (Lynn White, Jr.). Air pollution and fuel crises in preindustrial London, 1250–1650 (William H. Te Brake). The replacement of the longbow by firearms in the English army (Thomas Esper). On the social explanation of technical change: The case of the Portuguese maritime expansion (John Law). Muskets and Pendulums: Benjamin Robins, Leonhard Euler, and the ballistics revolution (Brett D. Steele). The philosophy of Luddism: The case of the West of England woolen workers, ca. 1790–1809. Roads, railways, and canals: Technical choices in 19<sup>th</sup>-century Britain (Francis T. Evans). The expansion and diffusion of Western industrial technology (ca. 1850 to present): Technology and the industrial West (Terry S. Reynolds and Stephen H. Cutcliffe). Economic development and the transfer of technology: Some historical perspectives (Nathan Rosenberg). The weapons of the West: Military technology and modernization in 19<sup>th</sup>-century China and Japan (Barton C. Hacker). The "Industrial Revolution" in the home: Household technology and social change in the 20<sup>th</sup> century (Ruth Schwartz Cowan). The development of the diesel engine (Lynwood Bryant). The emergence of basic research in the Bell telephone system, 1875–1915 (Lillian Hoddeson). Flexibility and mass production at war: Aircraft manufacture in Britain, the United States, and Germany, 1939–1945 (Jonathan Zeitlin). Space-age Europe: Gaullism, Euro-Gaullism, and the American dilemma (Walter A. McDougall). Nuclear power and the environment: The atomic energy commission and thermal pollution, 1965–1971 (J. Samuel Walker). Index.

*Finite-State Language Processing*. Edited by Emmanuel Roche and Yves Schabes. MIT Press, Cambridge, MA. (1997). 464 pages. \$45.00.

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Preface. Acknowledgments. 1. Introduction (Emmanuel Roche and Yves Schabes). 2. Finite-state morphology: Inflections and derivations in a single framework using dictionaries and rules (David Clemenceau). 3. Representations and finite-state components in natural language (Kimmo Koskenniemi). 4. The replace operator (Lauri Karttunen). 5. Finite-state approximation of phase-structure grammars (Fernando C.N. Pereira and Rebecca N. Wright). 6. The lexical analysis of natural languages (Max D. Silberstein). 7. Deterministic part-of-speech tagging with finite-state transducers (Emmanuel Roche and Yves Schabes). 8. Parsing with finite-state transducers (Emmanuel Roche). 9. Designing a (finite-state) parsing grammar (Atro Voutilainen). 10. Applying a finite-state intersection grammar (Pasi Tapanainen). 11. The construction of local grammars (Maurice Gross). 12. On the use of sequential transducers in natural language processing (Mehryar Mohri). 13. FASTUS: A cascaded finite-state transducer for extracting information from natural-language text (Jerry R. Hobbs *et al.*). 14. Rational transductions for phonetic conversion and phonology (Éric Laporte). 15. Speech recognition by composition of weighted finite automata (Fernando C.N. Pereira and Michael D. Riley). Contributors. Index.

*A Little Java, A Few Patterns*. By Matthias Felleisen and Daniel P. Friedman. MIT Press, Cambridge, MA. (1998). \$25.00.

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Foreword (Ralph E. Johnson). Preface. Experimenting with Java. 1. Modern toys. 2. Methods to our madness. 3. What's new? 4. Come to our carousel. 5. Objects are people, too. 6. Boring protocols. 7. Oh my! 8. Like father, like son. 9. Be a good visitor. 10. The state of things to come. Commencement. Index.

*Fortran 95 Handbook: Complete ISO/ANSI Reference*. By Jeanne C. Adams, Walter S. Brainerd, Jeanne T. Martin, Brian T. Smith and Jerrold L. Wagener. MIT Press, Cambridge, MA. (1997). 711 pages. \$50.00.

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*State Variables for Engineers*, (Second edition). By Paul M. DeRusso, Rob J. Roy, Charles M. Close and Alan A. Desrochers. John Wiley & Sons, New York. (1998). 575 pages. \$64.95.

Contents:

Preface to the Second edition. Preface to the First edition. 1. Time domain techniques. 2. State variable representation of systems. 3. Matrices, linear spaces, and linear systems. 4. State variables and linear continuous systems. 5. State variables and linear discrete-time systems. 6. Canonical forms for representing linear systems. 7. Observers and controllers. 8. Identification and estimation. 9. Introduction to stability theory and Lyapunov's method. Appendix I. Basic matrix algebra. Appendix II. Z transforms. Index.